



NASA, Army open new exhibit at Madison County Courthouse

A new panoramic display portraying NASA and the U.S. Army's contributions to the community has been unveiled at the Madison County Courthouse.

With the opening of the exhibit, Marshall Center Director Art Stephenson said, "Having this display in the Madison County Courthouse will be an excellent way to inform the public of the key role the space program and Marshall Space Flight Center have played and continue to play in our community." The Marshall director added, "NASA has had a longstanding, fruitful partnership with the Huntsville and Madison County area. I believe visitors to the courthouse will gain a good sense of that relationship through this display."

"The display illustrates NASA and the Army's importance to Madison County and the nation, added Lynne Lowery, director of Marshall's Government and Community Relations Office. "We believe this is a very visible, high-traffic location to tell our story."

Maj. Gen. Emmitt E. Gibson, commander of the U.S. Army Aviation and Missile Command said, "Team Redstone and the U.S. Army Aviation and Missile Command are excited about being a part of the new display in the courthouse.

"We enjoyed working with NASA to create this panoramic overview," said Gibson. "I hope our depiction of some of the many contributions the Army has made to the growth of Huntsville and Madison County will help visitors gain additional



NASA photo by Dennis Olive

A new display at the Madison County Courthouse in Huntsville informs the community of Marshall and the Army's key roles.

insight into our community's history."

Designed by AI Signal research Inc. of Huntsville and Army graphics personnel, the display can be viewed in the courthouse lobby.

Using Space Shuttle technology, heart assist pump effective in European trials

A miniaturized ventricular-assist pump, developed for heart patients using NASA technology, has been successfully implanted into seven people in European clinical trials. More than 20 additional implants are expected by mid-1999.

The tiny device has functioned normally and to specification, said Dallas Anderson, president and chief executive officer of MicroMed Technology Inc. of Houston, Texas, the company to which NASA granted exclusive rights for the pump. Specific medical information on the individual patients is confidential. But one person has undergone a success-

ful heart transplant after 75 days with the device implanted in his chest. That, Anderson said, demonstrates the pump's capability to keep a patient alive until a donor heart becomes available.

Initially called the NASA/DeBakey heart pump, it is based in part on technology used in Space Shuttle fuel pumps. It is intended as a longterm "bridge" to transplant, or as a more permanent device to help patients toward recovery leading to a more normal life. About 5 million Americans suffer from heart failure annually. Approximately 35,000 heart failure patients need transplants each year, but

See Heart assist pump on page 5

All-hands meeting 8 a.m. Monday

Marshall Center Director Art Stephenson will conduct an all-hands meeting at 8 a.m. Monday, March 1, in Morris Auditorium.

Marshall's organizational development teams will present the status of the Center's reorganization initiative.

The meeting will be broadcast on closed-circuit television.

"Have a great safe day "

— Safety slogan submitted by
Richard Smith, HEI

Marshall Center observes National Engineers Week

by Mike Wright

Pat McRight wasn't even born in 1962 when Dr. Wernher von Braun, the first director of the Marshall Center, defined the word "engineering."

Today McRight is a Marshall propulsion system engineer and understands von Braun's definition "Engineering is the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize economically the materials and forces of nature for the progressive well-being of mankind."

Much has changed in the field of engineering since von Braun offered that definition in a speech entitled "Educating Engineers in the Space Age" at the College of Engineering at the University of Alabama in Huntsville more than 35 years ago. What has not changed is NASA and the nation's dependence on well-trained, highly qualified engineering professionals.

This week the Marshall Center is joining others across the country to mark National Engineers Week. Founded in 1951 by the National Society of Professional Engineers, National Engineers Week is designed to increase public awareness and appreciation of the engineering profession and technology. Thousands of engineers, engineering students, teachers and leaders in government and business participate each year.

McRight was only 6 years old when Neil Armstrong announced July 20, 1969, that the "Eagle has landed." He remembers "being riveted to the television, amazed that the image on the black and white TV was the same moon I saw at night."

Now, 30 years later, McRight remains in awe of engineering challenges the Marshall Center faced in the 1960s in developing the Saturn rockets. "It astounds me to know what can be done when a government, public and an agency are focused on



NASA photo by Dennis Olive

Kimberly Robinson, far right, a project manager in Marshall's Microgravity Research Program Office, explains the importance of math and science, as it relates to engineering, to eighth graders at Whitesburg Middle School Tuesday. Robinson, a Project Laser volunteer, visited the school as part of National Engineers Week.

accomplishing a goal," he says, referring to the Apollo program.

The challenge for tomorrow's space engineers, suggests McRight, is "to do more with less. In addition to developing new technologies, we'll also see a refining of existing ones, particularly as processes are brought in line with today's leaner budgets and tougher environmental and safety regulations."

As part of National Engineers Week, 17 volunteers from the Marshall Center are visiting 17 area schools helping students learn more about how science, math and engineering relate to the world around them and why their studies are important. The effort is part of Marshall's Project LASER — Learning About Science, Engineering, and Research.

"This allows us to reach more than 1,400 students," said Tammy Rowan of Marshall's Education Programs Office. "National Engineers Week has grown to be the largest outreach effort of its kind sponsored by the engineering profession," Rowan added.

The writer works as the Center historian in Marshall's Internal Relations and Communications Office.

What does the phrase 'We bring people to space, we bring space to people' mean to you?

"One of Marshall's primary missions is to provide current and future propulsion systems which actually put people into space. Also, through Marshall's scientific research and payload developments, we bring space to people by manufacturing new products and increasing awareness of the benefits of space to all humankind."



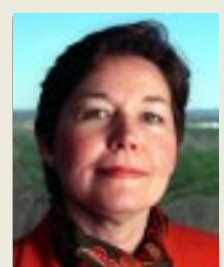
Jim Ellis
assistant to the director,
Center Operations
Directorate

"With each Space Shuttle launch, people internationally, from all walks of life, become aware of space exploration by many of Marshall's educational outreach programs, medical spinoffs and technology transfer. Each astronaut training class and Space Camp class brings simulated space conditions to children and adults."



Rita Evans-McCoy
personnel management
specialist,
Human Resources
Office

"As NASA's center of excellence for space propulsion, Marshall's goal is to bring people safely to space for purposes of research, exploration and development of space. Space-related research has brought numerous benefits to Earth and many new discoveries will continue through Space Shuttle and International Space Station research."



Kim Jeffreys
budget analyst,
Office of Chief
Financial Officer

Bill Taylor recalls high points of 35-year Marshall career

by Mike Wright

Bill Taylor can sum up almost 35 years with the Marshall Space Flight Center in a few words: "Wonderful career, wonderful people, wonderful work."

"It could not have been any better," says Taylor, who recently retired as director of Marshall's Science and Engineering Directorate.

Born in Jeffersonville, Ind., Taylor graduated from Jeffersonville High School in 1954. He did undergraduate work at the Indiana University Southeastern Extension in Jeffersonville and Purdue University in West Lafayette, Ind. In 1959, he received a master's degree in business administration from Florida State University.

Reflecting on his years after graduation from Purdue, Taylor admits he had no real interest in a career in aerospace. Instead, he began work as a production engineer with Barber-Coleman Corp. in Rockford, Ill.

Encouragement to move from manufacturing and production into what he calls "the romance area, the space business," came from friends already in the aerospace field. In those days, however, the future of the missile and space program was uncertain, Taylor recalls. "There was a feeling that maybe it will last, maybe it won't. It was very early. No one could really foresee what was going to happen in the aerospace community." It was the early 1960s and Taylor didn't "want to make any decisions where I could be laid off the next day."

Nevertheless, he decided to take the chance. In 1962, Taylor began work as a launch control engineer for General Dynamics Astronautics at Vandenberg Air Force Base, Calif. "That was my first real introduction to the aerospace business. That's when it really got into my blood."

Despite his enchantment with the California aerospace industry in the early

1960s, Taylor and his young family felt the Midwest calling them home. Huntsville, Ala., wasn't Indiana but it was closer to home than California. So, in 1963 Taylor joined the Chrysler Corporation as a contractor working on the Saturn I launch vehicle at the Marshall Center. It was, he says, "a great hands-on experience."

In 1964, Taylor joined the civil service workforce at the Marshall Center — still

Agency; and became deeply involved with the Hubble Space Telescope. In 1983, he was named branch chief of the Ground Systems Analysis Branch in the Space Telescope Systems in the Systems Laboratory. In 1984, he was named deputy division chief in the Space Telescope Systems Division and began an extended tour of duty at the Lockheed Missiles and Space Company facility, Sunnyvale, Calif. There he served as the on-site manager of

assembly and verification activities. In 1986, Taylor was named manager of the Hubble Space Telescope Systems Engineering Office in that Project Office. He was designated as chief engineer for the Hubble Space Telescope and Advanced X-ray Astrophysics Projects.

After the Hubble was launched and difficulties arose, Taylor remained confident that the problem could be fixed. "You had to be optimistic. If you got pessimistic, these things could get to you. Part of it, for me, was leadership that others instilled in me. I knew we had a very robust system." Today, he calls the Hubble a "marvelous machine."

In 1992, Taylor was appointed

project manager for the Advanced X-ray Astrophysics Facility. A year later, he became project manager of the Space Station Furnace Facility. These projects stand out in his mind for the teamwork that they reelected.

In 1996, he accepted a one-year assignment as deputy chief engineer at NASA Headquarters in Washington, D.C. In March 1997, Taylor became deputy director of Science and Engineering. He was named its director in December 1997.

Now, ready to enjoy retirement, Taylor believes the future of the Marshall Center is bright. "The challenges are still there. Adapting the right attitude is one of the things that make people successful."

The writer works as the Center historian in Marshall's Internal Relations and Communications Office.



NASA photo by Dennis Olive

Marshall Center Director Art Stephenson, right, presents a memento to Bill Taylor, who has retired as the director of the Science and Engineering directorate. Taylor was honored at a ceremony Tuesday in the Building 4203 cafeteria.

working close to the Saturn family of launch vehicles. "I initially thought Huntsville was a way stop on the road to somewhere else. As it turns out, more than 35 years later, I'm still here."

From 1964 to 1967, Taylor was a member of Marshall's Quality and Reliability Assurance Laboratory. Needing to move beyond the hands-on testing business, he worked as a Marshall systems engineer from 1967 until 1986.

In 1977, he was appointed branch chief of Skylab's Ground Operations Engineering Branch in the Systems Analysis and Integration Laboratory. "Essentially, until the mid-1980s, I was really in systems engineering," Taylor said. He worked on Spacelab payload development and Spacelab payload capabilities with the European Space

Specific operations require certification

by Judy Milburn

Marshall Center employees who perform specific operations or operate specific equipment must be certified.

Employees should submit a completed MSFC Form 4083, "Personnel Certification" to the Industrial Safety Office for review. Employees who meet the requirements listed in MPG 1700.1, "MSFC Industrial Safety Procedures and Guidelines" Section 3-2/Training and Certification, Table 3-2.2, are issued a Personnel Certification Card, MSFC Form 4313.

A copy of MSFC Form 4083 and the certification card are mailed to the employee's supervisor; the original is maintained by ISO and information entered into a database. Contractor certifications are mailed to the Contractor Certifying Officer.

- Operations and equipment at Marshall requiring certification are:
- Asbestos Abatement
- Aerial Lift Operator
- Confined Space Entry

- Overhead Crane & Hoist Operators
- Lift Riggers
- Cryogen Handlers
- Flight Deck Crew
- Forklift Operators
- Hazardous Materials Handlers
- Heavy Equipment Operators
- High pressure Systems
- Hydraset Operator
- Hyperbaric Chamber
- Laser Operators
- Laser Maintenance Personnel
- Lockout/Tagout, Authorized
- Mobile Crane Operator
- Program Critical Hardware/all operations
- Propellant & Explosives Handler/User
- Respirators (Non-SCBA)
- Rigging Equipment/Sling Inspector
- Rescue Personnel
- Self-Contained Breathing Apparatus (SCBA)
- Wind Tunnel Operators

Employees with questions regarding certification may call the Industrial Safety Office at Marshall at 544-0046.

The writer works in Marshall's Industrial Safety Office.

Boeing, its employees and retirees donate \$1.3 million to Alabama

The Boeing Co., its employees and retirees, donated \$1.3 million in 1998 in assistance and contributions to the communities in which employees live and work in Alabama. Nearly half of those gifts, \$518,000, came from Boeing employees.

Education institutions and programs, health and human services agencies, arts and cultural organizations, and civic and environmental groups benefited from company and company-sponsored giving programs.

In Alabama, the company contributed more than \$136,300 in surplus donations and \$32,000 in in-kind donations, including loaned executives.

Nearly half of the company contributions went to education programs across the state. Boeing is committed to a performance-based educational system and is involved in education initiatives at local, state and national levels. The company contributes to educational reform through corporate and personal leadership and financial support.

The Boeing Co. is the world's largest manufacturer of commercial and military aircraft and a leader in manufacturing commercial and military space systems. The company has more than 232,000 employees in 27 states and 60 countries, with customers in more than 145 countries. In Alabama, Boeing has 2,800 employees.



NASA photo by Emmett Given

Center Director Stephenson tours Oakwood College

Tim Allston, right, executive director of public relations at Oakwood College in Huntsville, describes the institution's history to Marshall Center Director Art Stephenson, center, and Marshall Equal Opportunity Director Charles Scales during a recent tour of the campus.

Obituary

Goldsby, William, 85, Jackson, Tenn., died Feb. 4. Goldsby retired from the Marshall Center in 1971 where he worked as a supervisor contracts specialist.

Griner to be honored by Girls Inc.

Marshall Center Deputy Director Carolyn Griner will be honored Thursday, March 18, at the Marriott Hotel during a luncheon hosted by Girls Incorporated of Huntsville. Griner will receive the "She Knows Where She's Going Award." The award honors women of achievement who, in their personal and professional lives, serve as role models to girls. Other honorees will be Huntsville Mayor Loretta Spencer and Janet Martin, director of public relations, Calhoun Community College. This is the sixth year local women have been honored by the organization. Ticket cost is \$25 and may be purchased by calling 851-9911.

Advanced Propulsion Workshop April 5-8

The 1999 NASA/American Institute of Aeronautics and Astronautics Advanced Propulsion Workshop will be held April 5-8 at the Tom Beville Center, Sparkman Drive, Huntsville. Marshall Center Director Art Stephenson will speak. Registration will be paid for Marshall employees who have registered. Anyone interested in presenting an Advanced Propulsion concept-related topic should e-mail an abstract of the presentation to Dr. Stephanie Leifer, technical chairperson, at: sleifer@mail1.jpl.nasa.gov

For more information, contact Dr. Chris Barret, general chairperson, at 544-7118, or e-mail to: Chris.Barret@msfc.nasa.gov

National Forum on Future Development of Space set March 16 in Washington, D.C.

The Marshall Center has teamed with NASA Headquarters and the U.S. Chamber of Commerce to hold a one-day forum on space development at the Chamber Headquarters in Washington, D.C., March 16. NASA Administrator Dan Goldin will speak at the event expected to attract business and government leaders interested in the economic development of existing and new space enterprises. More information and registration materials may be found at the following Web site: <http://www.uschamber.org/intl/space/>

Volunteers needed for Take Our Children to Work committee, Easter Egg Hunt

The Equal Opportunity Office at Marshall is seeking volunteers to chair and/or serve on the 1999 Take Our Children to Work committee. Interested employees should call Alicia Beam at 544-2849 or e-mail to: alicia.beam@msfc.nasa.gov

Volunteers also are needed to help with the annual NASA Exchange-sponsored Easter Egg Hunt scheduled for 2 p.m. March 21. Children of Marshall employees and on-site contractors may participate. Contact Gena Marsh at 544-0128, or Donna Mahieux at 544-7511.

Heart assist pump

Continued from page 1

only 2,500 donor hearts are available.

The concept for the pump began with talks between Baylor College of Medicine's Dr. Michael DeBakey and one of his heart transplant patients, NASA engineer David Saucier, who worked at Johnson Space Center in Houston. Saucier knew first-hand the urgency heart-failure patients feel waiting for a donor heart. He also knew Space Shuttle technology.

Six months after his 1984 heart transplant, Saucier was back at work. With fellow NASA employees, DeBakey, George Noon and other Baylor College of Medicine staff, Saucier worked evenings and week-ends on the initial pump design.

During the effort Saucier said: "Since my own transplant, I have spent a lot of time visiting people who are waiting for a donor heart." He said he felt a sense of urgency to

develop the pump. NASA began funding the project in 1992. Saucier died in 1996.

The result was a remarkable battery-operated pump — 2 inches long, 1 inch in diameter and weighing less than four ounces — that seems to be an answer to the decades-long quest to develop an implantable ventricular-assist pump. And it is small enough to fit into a child's chest.

NASA, in keeping with its mission of transferring space-based technology to the private sector, wanted to license the pump to a company that could further develop and test it to bring it into public use.

After intense competition, MicroMed was granted exclusive rights to it in 1996. Anderson said MicroMed was selected partly because it intended to develop the pump as a unit rather than use parts of the technology in other development projects.

Such pumps have three potential problems — destruction of red blood cells, formation of blood clots and the body's reaction to a more continuous blood flow rather than the normal pulsed flow of blood. The Johnson team, with help from NASA's Ames Research Center, Moffett Field, Calif., used super computers to analyze shuttle fuel-flow dynamics to reduce red cell damage to a point comfortably below acceptable limits. The improved flow pattern also reduces the tendency for clots to form. No adverse neurological effects have been seen in the implant patients due to the pump's more continuous flow of blood.

In the two years after receiving the license, MicroMed gained international quality and electronic standards certifications, got permission to begin clinical trials in Europe and implanted the first device. The first patient, a 56-year-old man, received what is now called the DeBakey VAD(TM) in Berlin in November 1998. The company hopes to begin U.S. clinical trials in mid-1999.

NASA, in keeping with its mission of transferring space-based technology to the private sector, wanted to license the pump to a company that could further develop and test it to bring it into public use.

At the Marshall Center

Employees, contractors earn Silver Snoopy Awards

The STS-88 mission crew presented Silver Snoopy Awards to Marshall Center employees and on-site contractors during their Marshall visit last Friday.

The Silver Snoopy Award is presented to employees in appreciation for their "professionalism, dedication and outstanding support that greatly enhanced flight safety and mission success while supporting the Space Shuttle, Space Transportation Program."

STS-88 Commander Robert Cabana presented the awards to Sverdrup Technology employees Hilary Evans, Kent Lasley and Lila Paseur. He also gave awards to John Honeycutt of Boeing Reusable Space Systems and Charlie Young of Boeing Rocketdyne.

Pilot Rick Sturckow presented Silver Snoopy Awards to Terry Odum of Steinhoff and Sadler Inc.; and to Marshall employees Jane Locke, BR01; Jerry Shelby, EJ71; Edwin Miller, EE11; Preston McGill, EH23; and Bruce Askins, EH53.

Mission Specialist Jerry Ross made award presentations to Center employees Robert Linner, EB44; Alice Dorries, EO65; Julie Sanchez, EO65; Gregory Swanson, ED25; and Robert Lightfoot, EP91.

Hody Childress and Burl Dunlap of Lockheed Martin were presented Silver Snoopy Awards from Mission Specialist James Newman. Newman also made awards to Thiokol's Kenneth Crosson and Marshall employees Tony Clark, EL23; and Lawrence Thomas, EL02.



NASA photo by Shirley Phillips

Hody Childress, left, and Burl Dunlap, right, of Lockheed Martin were presented Silver Snoopy Awards from Mission Specialist James Newman.



NASA photo by Emmett Given

Mission Specialist Jerry Ross, second from left, made award presentations to Center employees, from left, Julie Sanchez, EO65; Alice Dorries, EO65; and Gregory Swanson, ED25.

At the U.S. Space & Rocket Center

Blackwell to head new Spatial Technology Center

Dr. Tommie Blackwell has been named senior vice president of spatial technologies and will head the new Spatial Technologies Center at the U.S. Space & Rocket Center.

"We're excited about the great advances being made worldwide in spatial technologies and the role that the Space & Rocket Center can play in that field," said Mike Wing, president and chief executive officer of the Space Center.

"Given her strong educational and training background combined with entrepreneurial abilities, Blackwell is uniquely qualified to head up this new operating unit that will focus on application and training aspects," Wing added.

Blackwell came to the Space Center in 1991 to serve as director of education. While in that capacity, she also served as assistant director for education of the GLOBE Program in the executive office of the Vice President of the United States. GLOBE is a high-tech, Internet-based environmental program for K-12 students around the world. Blackwell was named the director of advancement for the Space Center in 1996.

"Spatial technologies are opening the way to fundamental changes in the way business and education is conducted throughout the world," said Blackwell.

One of the goals of the new Spatial Technology Center is to create an experimental environment in which all ages can conduct project-based research that will bring the hard sciences into Space & Rocket Center and U.S. Space Camp educational programs. A second goal is to make the public more aware of spatial technology and its benefits.

Spatial technology applications include Geographic Information System, Global Positioning Systems and Remote Sensing. Weather forecasting is the most commonly known use of spatial technology, but other uses include agriculture, mapping, city planning and disaster relief.

Paul Gill of the Systems Analysis and Integration Laboratory at the Marshall Center has been recognized for his dedication to excellence as the senior staff member of the NASA Technical Standards Program. Marshall is the lead center for that program.

Nathaniel Bocclair, chief of the Huntsville Operations Support Center, Operations Branch, Mission Support Division, Mission Operations Laboratory at the Marshall center has been recognized for his direction of engineers and contractors to maintain technical and operational expertise in ground data systems to assure operational readiness. The Huntsville Operations Support Center supports Space Shuttle pre-launch activity, Spacelab and Space Station missions.

"Marshall Stars" is an occasional feature in the Marshall Star recognizing Marshall Center employees and contractors who have made significant contributions to NASA and the Marshall Center by taking significant strides in leadership and dedication to their professional and/or educational development.

Employees and contractors may nominate themselves or another employee. Submit your nominations for consideration to Angela Storey, CO40, or call 544-0030.



NASA photo by Doug Stoffer

Success stories sought

Accomplishments of small businesses in Madison County to be recognized

Marshall Center contractors are eligible for the Huntsville/Madison County Chamber of Commerce "Catch a Rising Star Award" in recognition of business achievements. Selections will be announced during an awards banquet at 6 p.m. June 15 at the Von Braun Center North Hall. A free Chamber kick-off breakfast for the awards will be held at 7 a.m. June 8 at the Von Braun Center North Hall.

The Chamber is seeking Madison County business success stories — outstanding business efforts by an individual or company. Awards will be presented in seven categories for businesses with fewer than 350 employees. Three finalists will be selected from each of the following categories:

- Business services
- Manufacturing services
- Personal services
- Construction services
- Executive of the Year
- Retail and wholesale services
- Technology services

Finalists will be judged on community involvement, innovative product and service, financial growth, years in business,

Marshall physicist builds model rocket to be shown on national television show

Vince Huegele, an optical physicist in Marshall's Astrionics Laboratory, completes work on a model rocket he built for retired Marshall employee Homer Hickam. The model, a replica of a rocket built by Hickam 35 years ago, will be shown by Hickam during his appearance on David Letterman's "Late Show" scheduled for Thursday, Feb. 25. Hickam is on a publicity tour for the movie "October Sky," an adaptation of Hickam's book, "The Rocket Boys."

employment growth and response to adversity.

Nominees must have been in business in Madison County prior to Dec. 31, 1996, and be enrolled as a Chamber member by April 1, 1999. Deadline for submitting nominations is March 22. Nomination forms are available from Rosa Kilpatrick in Bldg. 4200, room 828, 544-0042.

Ticket cost for the awards banquet is \$30 and will be available in late April from Kilpatrick or any Chamber member.

For more information about Huntsville/Madison County Chamber of Commerce membership, call 535-2027.

Employee Ads

Miscellaneous

- ★ Bicycle built for two. 881-6143
- ★ Hotpoint washer, \$100; coffee and end table set, \$225; pillow back sofa, \$150. 830-4304
- ★ Motorola cellular phone w/leather case, two batteries, charger, cord for car, \$40. 784-9099
- ★ Coronado chest-type freezer, 20 cu. ft., \$125. 880-7376
- ★ Diamond solitaire engagement ring, round cut, slightly under 1/2 carat, four-prong setting, diamond-encrusted wedding/anniversary band, \$900. 461-4317
- ★ Starcraft travel trailer, 24', sleeps five, rollout awning, \$3,000. 723-4991 or 723-4987
- ★ Tuxedo, black, jacket size 40L, pants w/ adjustable waist 31 regular, shirt size medium, \$75; black tailcoat, size 40L, \$40. 464-9910
- ★ Dinette set, black faux stone table w/four black fabric side chairs, \$600. 922-0915
- ★ Turbo Tax, federal 1998 tax year, \$8; Quicken Version 1, \$5; Risk CD-rom, \$10. 828-9651
- ★ Kenwood stereo speakers, 5-way w/16" woofer, \$150 each; modem, 14.4K with fax capability, \$10 o.b.o. 881-8674
- ★ Aquariums, 20-gallon, all accessories, \$30; 55-gallon, all accessories and black lacquer cabinet stand, \$200. 797-4623
- ★ White dishes w/moo cow trim, 8 pc., w/ matching glasses, silverware, table accessories, decoration items, \$65. 797-4623
- ★ Whirlpool washer/dryer set, multi-speed, multi-cycle, \$150; Panasonic VCR, \$20. 883-7348
- ★ TV satellite, 10' dish system with four months programming, \$500. 883-2529

Vehicles

- ★ 1995 Chrysler New Yorker, all security and safety features, Infinity stereo, 64K miles, \$9,800. 880-9025
- ★ 1996 Chevrolet Camaro, 350 w/350 turbo trans., blue and white custom paint, \$13,500 o.b.o. 776-4624
- ★ 1995 Firebird, silver, 350 motor, 6-speed, 72K miles, \$12,900. 232-4305
- ★ 1989 diesel 350 Clubwagon, 12-passenger extended length, trailer hitch, 132K miles, \$6,500. 881-9421
- ★ 1993 Plymouth Grand Voyager SE, 3.3L engine, PS/PB/PDL, cruise, AM/FM cassette, 95K miles, \$6,500. 536-6785
- ★ 1995 Ford Ranger XLT, green, 29K miles, 5-speed, A/C, cassette, alarm, bedliner, \$8,600. 922-9387

Wanted

- ★ Dining room suit w/eight chairs, buffet or china cabinet, traditional style, solid wood. 519-6608
- ★ Bronica ETRS camera equipment, studio lighting and backdrops. 722-0882

Center Announcements

- ✦ **MARS Tennis Club** — The MARS Tennis Club is holding a membership drive and league sign-up through March 15. Membership includes use of Marshall Center tennis courts, participation in tournaments and club activities, and eligibility for singles and doubles leagues. NASA employees, retirees, on-site contractors and family members are eligible. For more information or to receive a membership package, **contact** Amy Hemken at 544-7097 or e-mail to: amy.hemken@msfc.nasa.gov
- ✦ **Softball Meeting** — The 1999 softball season kick-off meeting is 11 a.m. Wednesday, March 3 in Marshall's Activities Bldg. 4752 all-purpose room. A representative from each team should attend. If a team representative cannot attend, **contact** Stan Fuller at 544-1508.
- ✦ **MARS Golf Club** — The first 1999 MARS Golf tournament is March 13 at the Huntsville Municipal Golf Course. The format will be handicap. Entry deadline is March 5. The entry fee is \$4 and open to all NASA employees, retirees and on-site contractors. Entry contacts are: Lee Foster at 544-1589, Joey Butler at 544-3808 and Bill Galloway at 544-0558. For more information, **contact** P. McKinnon at 544-0579.
- ✦ **NASA Lunar Nooners Toastmasters** — The NASA Lunar Nooners Toastmasters Club will meet at 11:30 a.m., Tuesday, March 2 in the Bldg. 4610 cafeteria conference room. All Marshall Center employees, contractors and friends are invited. **Contact:** Lee Johns at 544-5142
- ✦ **Walk-a-Thon team needed** — Marshall's Equal Employment Opportunity Office is seeking five team members to represent the Center during the Sickle Cell Anemia Walk-a-Thon Saturday, May 22. Center employees and on-site contractors are invited to participate in the event, sponsored by the North Alabama Sickle Cell Foundation Inc. Interested employees may e-mail to: jeneene.sams@msfc.nasa.gov

- ✦ **Kids Web site** — The Los Angeles Times is featuring Marshall's Liftoff for Kids Web site on Launch Point — its print and online education page. The subjects for Launch Point — the newspaper's collection of educational links for students and parents — are selected to complement California public schools' curriculum and carefully screened by educational experts for quality and appropriate grade level. Liftoff for Kids may be found at the following Web site: <http://liftoff.msfc.nasa.gov/kids/>
- ✦ **Technical Conference** — The 4th annual Technical Conference of the Association for Configuration and Data Management will be held March 29-April 1 at the Renaissance Waverly Hotel in Atlanta, Ga. The conference theme is "The New Paradigm — Thinking Out of the Box." Complete details of the conference may be found at the following Web site: <http://www.acdm.org> For more information, **contact** Brenda Sutherland at 544-6552; or Brenda Kyle at 955-1589.
- ✦ **MARS Ballroom Dance Club** — The MARS Ballroom Dance Club will offer triple swing and foxtrox lessons 7-8 p.m. March 1, 8, 15 and 22 in the Parish Hall of St. Stephen's Episcopal Church, 8020 Whitesburg Drive. Lessons are available to MARS Ballroom Dance Club members and partners/guests at \$6 per person biweekly.
- ✦ **National Contract Management Association** — The Huntsville Chapter of the National Contract Management Association will host the 1999 National Educational Seminar 8:30 a.m.-5 p.m., Tuesday, March 16 at Trinity United Methodist Church, 607 Airport Road. This year's theme is "Innovative Contracting, Practical Approaches." Registration will begin at 8 a.m. **Contact:** Paula Cushman at 895-2804 or John Masson at 971-6424
- ✦ **Free symposium** — A symposium, "Space Exploration at the Millennium, In Remembrance of Carl Sagan," will be held Wednesday, March 24, at American University in Washington, D.C. The symposium is free and open to the public, but seating is limited. Attendees may register at the following Web site: <http://www.SPACE2000.org> This symposium will present key figures of 20th century creativity and achievement. It will offer a retrospective on one of this century's crowning accomplishments — the genesis of space exploration — and consider its future.

MARSHALL STAR

Vol. 39/Num. 24

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The Marshall Star is published every Thursday by the Internal Relations and Communications Office at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Contributions should be submitted no later than Monday noon to the Marshall Internal Relations and Communications Office (CO40), Bldg. 4200, room 101. Submissions should be written legibly and include the originator's name. Send electronic mail submissions to: angela.storey@msfc.nasa.gov The Marshall Star does not publish commercial advertising of any kind.

Director of Internal Relations
and Communications — Norman Brown
Managing Editor — Angela D. Storey
Writer-Editor — Ann Marie Bryk
<http://www.msfc.nasa.gov>

U.S. Government Printing Office 1999-733-111-80049

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